

CLAIMS

What is claimed is:

1. partition wall, upwardly movable into storage position and downwardly movable into vertical, down position, the wall comprising:

a plurality of similar trains of elongated members, the members of each train arranged to form a single pantograph forming longitudinally aligned rows of diamonds, the trains spaced laterally to form a wall plane and oriented so that the diamonds of the pantographs operate in a plane at a 90° angle to that wall plane;

a plurality of panels, each panel secured to a pair of corresponding members in adjacent trains, the panels secured to corresponding pairs of opposed sides of the diamonds; and

means to raise and lower the trains at a similar rate, the pantographs being contracted when the wall is in storage position and the pantographs being elongated when the wall is in down position;

the panels forming a vertical wall when the pantographs are elongated in down position.

2. A wall according to claim 1, wherein similar pairs of elongated members intersect and are secured pivotally together at a central point between their ends, which point is on a longitudinal center line of each member, to form adjoining, longitudinally disposed apexes of adjacent diamonds, and corresponding ends of these pairs of intersecting members are pivotally connected to the ends of similar pairs of intersecting members at points which are laterally off set to the outside of that center line, to form at these ends laterally disposed apexes of the diamonds, so that when the trains are contracted the longitudinal apexes of each diamond are drawn together and the laterally disposed apexes are more separated, and when the trains are elongated the longitudinal apexes of each diamond become more separated and the laterally disposed apexes are drawn together.

3. A wall according to claim 2, wherein in each train, similar pairs of parallel elongated members, making up one pair of opposed sides of diamonds, are spaced about similar single members making up the other opposed pair of opposed sides of diamonds, the panels being secured only to members of the spaced pairs of elongated members along the length of the train.

4. A wall according to claim 3, wherein each panel is secured to adjacent elongated members of the spaced pairs of members in adjacent trains.

5. A wall according to claim 1, wherein the means to raise and lower the trains comprises a cable means secured to the train, and means to manipulate the cable means so as to simultaneously raise or lower the trains at a similar rate.

6. A wall according to claim 5, wherein the cable means comprises a plurality of cables, each of the cables secured to a different one of the lower ends of each of the trains, portions of the cables wound about a power driven line shaft so that rotation of the line shaft in one direction, winding up the cables, causes the trains simultaneously and at a similar rate to move to contracted position and rotation of the line shaft in the other direction, unwinding the cables, and causes the trains simultaneously and at a similar rate to move to down position.

7. A wall according to claim 1, wherein spaced pairs of panels are secured to pairs of corresponding members in adjacent trains.

8. A wall according to claim 4, wherein a pair of panels are secured to in spaced fashion, and extend between, adjacent ones of the elongated members in the spaced pair of members in adjacent trains so as to provide a double wall.